



Substitute for form 1449A-B/PTO  INFORMATION DISCLOSURE STATEMENT BY APPLICANT  (use as many sheets as necessary)		Complete if Known			
		Application Number	09/502,283		
		Filing Date	February 11, 2000		
		First Named Inventor	Sun Ai Raillard		
		Group Art Unit	Unassigned		
		Examiner Name	Unassigned		
		Attorney Docket Number	02-029510US		

U.S. PATENT DOCUMENTS						
Examiner Initials	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code (if known)			

FOREIGN PATENT DOCUMENTS								
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		Office	Number	Kind Code (if known)				
R	AA	WO	00/37684		Kris & Felder	06-29-2000		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS							
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.					T
R	AB	<u>CARTER, PAUL</u> (1985) "Improved Oligonucleotide-Directed Mutagenesis Using M13 Vectors" <i>Annu. Rev. Genet. Methods in Enzymology</i> vol. 154 pp. 382-403					
	AC	<u>CHANG et al.</u> , <i>Nature Biotechnology</i> (1999) vol. 17, pp. 793-797					
	AD	<u>CHAUVAUX N. et al.</u> <i>Journal of Chromatography</i> (1997) vol. 775, no. 1-2, pp. 143-150 <i>Abstract Only</i>					
	AE	<u>CHRISTIANS et al.</u> , (1999) "Directed evolution of thymidine kinase for AZT phosphorylation using DNA family shuffling" <i>Nature Biotechnology</i> 17:259-264					
	AF	<u>CRAMERI ET AL.</u> , 1994. "Combinatorial Multiple Cassette Mutagenesis Creates all the Permutations of Mutant and Wild-Type Sequences." <i>Biotech.</i> Pg. 194-197.					
	AG	<u>CRAMERI ET AL.</u> , 1996. "Construction and evolution of antibody-phage libraries by DNA shuffling." Pg. 100-102.					
	AH	<u>CRAMERI ET AL.</u> , 1996. "Improved Green Fluorescent Protein by Molecular Evolution Using DNA Shuffling." <i>Nature Biotechnology</i> . Vol.14 : Pg.315-319.					
	AI	<u>CRAMERI ET AL.</u> , 1997. "Molecular evolution of an arsenate detoxification pathway by DNA shuffling." <i>Nature Biotechnology</i> . Vol. 15: Pg. 436-438.					
	AJ	<u>CRAMERI ET AL.</u> , 1998. "DNA shuffling of a Family of Genes from diverse species accelerates directed evolution." <i>Nature</i> . Vol. 391: Pg. 288-291.					
	AK	<u>GATES ET AL.</u> , 1995. "Affinity Selective Isolation of Ligands from Peptide Libraries Through Display on a lac Repressor 'Headpiece Dimer.'" <i>J. Mol. Biol.</i> Pg. 1-14.					
	AL	<u>GRUNDSTROM ET AL.</u> (1985) "Oligonucleotide-directed Mutagenesis by Microscale 'Shot-gun' Gene Synthesis." <i>Nucleic Acids Research</i> Vol. 13, No. 9:Pg. 3305-3315.					
R	AM	<u>KRAMER &amp; FRITZ</u> (1987) "Oligonucleotide-Directed Construction of Mutations via Gapped Duplex DNA" <i>Methods in Enzymology</i> vol. 154 pp 350-367					

Examiner Signature		Date Considered	12/2/01
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Approved for use through 10/31/99. OMB 0651-0031

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<i>BB</i>	AN	<u>KRAMER ET AL.</u> (1984) "Different Base/Base Mismatches Are Corrected with Different Efficiencies by the Methyl-Directed DNA Mismatch-Repair System of <i>E. coli</i> ." <i>Cell</i> Vol. 38: Pg. 879-887.	
	AO	<u>KUNKEL, THOMAS A.</u> (1985) "Rapid and efficient site-specific mutagenesis without phenotypic selection" <i>Proc. Matl. Acad. Sci. USA</i> vol. 82 pp. 488-492	
	AP	<u>MINSHULL and STEMMER</u> (1999) "Protein evolution by molecular breeding" <i>Current Opinion in Chem. Biol.</i> 3:284-290	
	AQ	<u>NESS et al.</u> , (1999) "DNA shuffling of subgenomic sequences of subtilisin" <i>Nature Biotechnology</i> 17:893-896	
	AR	<u>PATTEN et al.</u> , (1997) "Applications of DNA shuffling to pharmaceuticals and vaccines" <i>Current Opinion in Biotech.</i> 8:724-733	
	AS	<u>SAKMAR ET AL.</u> (1988) "Total Synthesis and Expression of a Gene for the $\alpha$ -subunit of Bovine Rod Outer Segment Guanine Nucleotide-binding Protein (transducin)." <i>Nucleic Acids Research</i> 16Vol. 16, No.14:Pg. 6361-6372	
	AT	<u>STEMMER ET AL.</u> , 1995. "Single-step assembly of a gene and entire plasmid from large numbers of oligodeoxynucleotides." Vol. 164: Pg. 49-53	
	AU	<u>STEMMER</u> , "Sexual PCR and Assembly PCR." Pg. 447-458.	
	AV	<u>STEMMER</u> , 1994. "DNA shuffling by random fragmentation and reassembly: <i>In vitro</i> recombination for molecular evolution." <i>Proc. Natl. Acad. Sci. USA</i> . Vol. 91: Pg. 10747-10751.	
	AW	<u>STEMMER</u> , 1994. "Rapid evolution of a protein <i>in vitro</i> by DNA shuffling." <i>Nature</i> . Vol. 370 No. 4: Pg. 389-391.	
	AX	<u>STEMMER</u> , 1995. "Searching Sequence Space." <i>Bio/Technology</i> . Vol. 13: Pg. 549-553.	
	AY	<u>STEMMER</u> , 1995. "The Evolution of Molecular Computation." Vol. 270: Pg. 1510.	
	AZ	<u>WEINMANN et al.</u> , <i>J. of Analytical Toxicology</i> Vol. 22 (1998) pp. 319-328	
	BA	<u>WU et al.</u> , <i>Chemistry &amp; Biology</i> Vol. 4, no. 9 pp 653-657	
<i>BB</i>	BB	<u>ZHANG ET AL.</u> , 1997. "Directed evolution of a fucosidase from a galactosidase by DNA shuffling and screening." <i>Proc. Natl. Acad. Sci. USA</i> . Vol. 94: Pg. 4504-4509.	

Examiner Signature	<i>Mark Bonyhady</i>	Date Considered	12/2/01
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